

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1586698

Luminaire Tested: 22CZSP-A-49HE-L845-S

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1586698
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2608-884-6)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 22CZSP-A-49HE-L845-S
Description: 2x2 CZSP LED Luminaire, 4500K CCT and 4500 lumens, 80CRI, Smooth Lens, Air Vented Housing
Light Source: -
Ballast/Driver: -

Summary

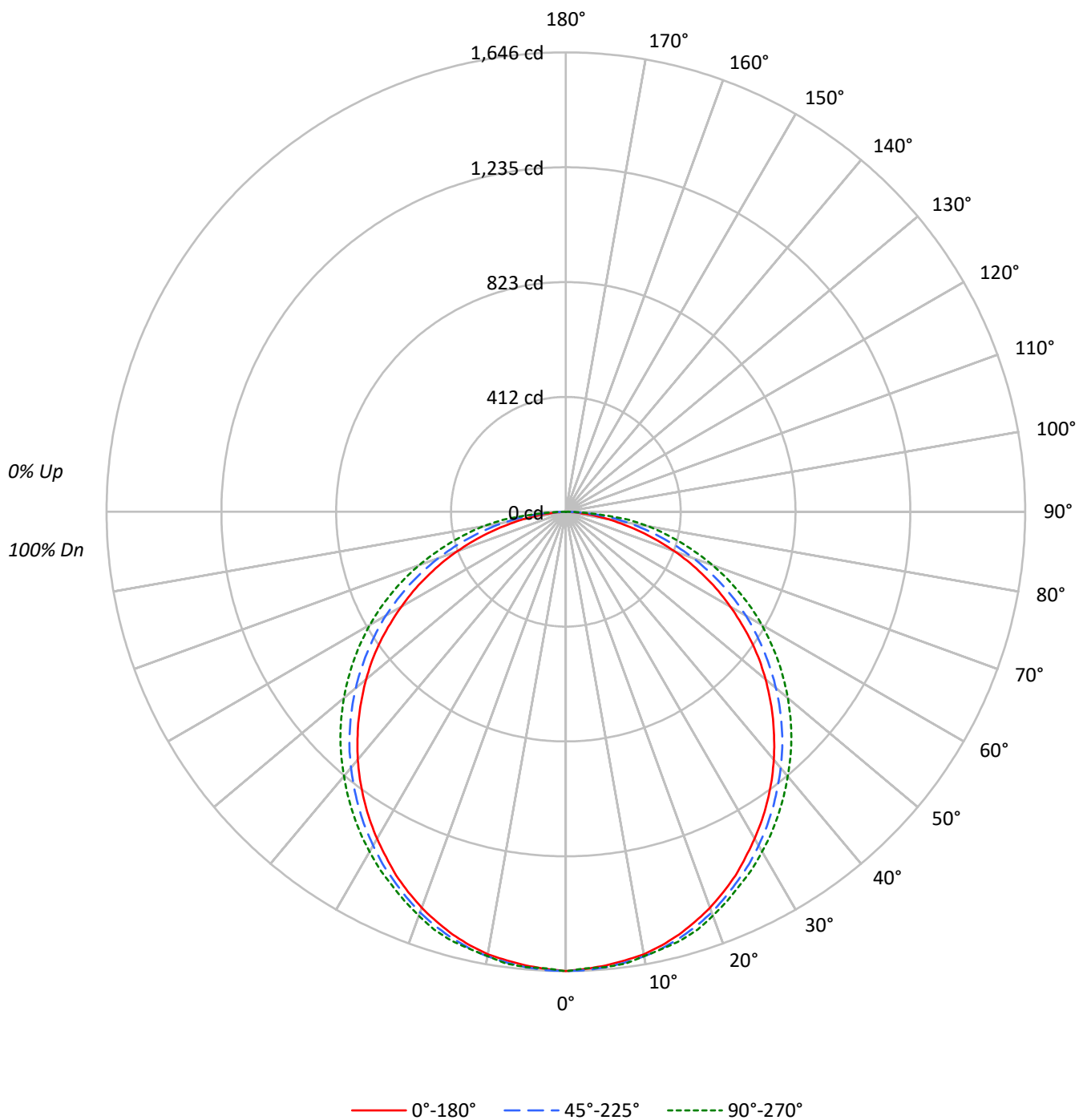
Lumens per Lamp: N/A
Luminaire Lumens: 4805.0 lumens
Efficiency: N/A
Efficacy: 149.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.37
Luminous Opening: Rectangular (W 1.88' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	99	95	106	101	97	93	97	93	90		93	90	88		89
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78
3	89	79	70	64	87	77	69	63	74	67	62		71	65	61		69
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		45
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		42
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38
10	52	39	31	26	51	38	31	26	37	30	25		37	30	25		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5154	5154	5154
5°	5130	5150	5147
10°	5119	5143	5139
15°	5082	5124	5154
20°	5031	5091	5133
25°	4969	5038	5100
30°	4891	4994	5086
35°	4820	4945	5070
40°	4741	4896	5056
45°	4650	4846	5061
50°	4551	4787	5059
55°	4432	4720	5065
60°	4265	4668	5078
65°	4070	4577	5093
70°	3794	4450	5116
75°	3380	4273	5166
80°	2795	4068	5419
85°	1818	3675	4735

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 82.5°

Luminance: 5590 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.7	3.2
10°-20°	445.7	9.3
20°-30°	672.2	14.0
30°-40°	809.6	16.8
40°-50°	845.5	17.6
50°-60°	776.5	16.2
60°-70°	611.6	12.7
70°-80°	375.2	7.8
80°-90°	112.9	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1273.5	26.5
0°-40°	2083.2	43.4
0°-60°	3705.2	77.1
0°-90°	4805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4805.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1632	1634	1638	1644	1637	155
15°	1568	1571	1580	1590	1590	442
25°	1438	1441	1458	1476	1476	662
35°	1261	1267	1294	1320	1326	789
45°	1050	1062	1094	1132	1143	810
55°	812	827	865	913	928	725
65°	549	568	618	670	687	543
75°	279	302	353	409	427	296
85°	51	70	102	130	132	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1645.8	1645.8	1645.8	1645.8	1645.8
2.5°	1639.5	1642.7	1643.7	1644.8	1637.4
5°	1632.1	1634.2	1638.5	1643.7	1637.4
7.5°	1621.6	1623.7	1629.0	1636.4	1633.2
10°	1610.0	1611.0	1617.4	1622.6	1616.3
12.5°	1591.0	1594.2	1601.6	1605.8	1603.7
15°	1567.8	1571.0	1580.5	1590.0	1590.0
17.5°	1540.4	1544.6	1556.2	1568.9	1569.9
20°	1509.8	1513.0	1527.8	1540.4	1540.4
22.5°	1475.0	1479.3	1494.0	1507.7	1509.8
25°	1438.1	1441.3	1458.2	1476.1	1476.1
27.5°	1394.9	1401.2	1422.3	1440.2	1444.5
30°	1352.7	1358.0	1381.2	1403.3	1406.5
32.5°	1308.4	1314.8	1339.0	1363.3	1368.5
35°	1261.0	1267.3	1293.7	1320.0	1326.4
37.5°	1211.4	1218.8	1246.2	1276.8	1283.1
40°	1159.8	1168.2	1197.7	1230.4	1236.8
42.5°	1105.0	1116.6	1148.2	1181.9	1191.4
45°	1050.1	1061.7	1094.4	1132.4	1142.9
47.5°	992.1	1005.9	1039.6	1079.7	1091.3
50°	934.2	947.9	982.7	1025.9	1038.5
52.5°	875.1	888.8	924.7	970.0	983.7
55°	811.8	826.6	864.6	913.1	927.8
57.5°	746.5	765.5	805.5	855.1	869.8
60°	681.1	700.1	745.4	793.9	810.8
62.5°	616.8	634.7	681.1	732.8	750.7
65°	549.3	568.3	617.8	669.5	687.4
67.5°	482.9	501.9	551.4	605.2	624.2
70°	414.4	435.4	486.1	539.8	558.8
72.5°	345.8	368.0	419.6	474.5	492.4
75°	279.4	301.5	353.2	409.1	427.0
77.5°	214.0	238.3	288.9	345.8	362.7
80°	155.0	178.2	225.6	281.5	300.5
82.5°	99.1	119.1	166.6	219.3	233.0
85°	50.6	69.6	102.3	129.7	131.8
87.5°	15.8	22.1	33.7	50.6	51.7
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	17.18	18.84	17.54	19.15	19.47	18.01	19.67	18.37	19.98	20.30
	3H	18.93	20.44	19.31	20.76	21.12	20.12	21.63	20.50	21.96	22.31
	4H	19.55	20.97	19.95	21.32	21.69	21.01	22.43	21.41	22.78	23.15
	6H	19.96	21.28	20.37	21.64	22.03	21.79	23.11	22.20	23.48	23.87
	8H	20.07	21.33	20.49	21.72	22.12	22.11	23.37	22.54	23.76	24.16
	12H	20.12	21.33	20.55	21.71	22.14	22.32	23.53	22.75	23.91	24.34
4H	2H	17.95	19.37	18.34	19.72	20.09	18.59	20.02	18.99	20.36	20.74
	3H	19.92	21.12	20.33	21.52	21.92	20.95	22.15	21.36	22.54	22.94
	4H	20.66	21.75	21.09	22.16	22.59	22.00	23.09	22.43	23.50	23.93
	6H	21.19	22.14	21.64	22.58	23.04	22.95	23.90	23.41	24.34	24.80
	8H	21.34	22.23	21.79	22.67	23.13	23.35	24.24	23.81	24.68	25.15
	12H	21.42	22.22	21.90	22.70	23.17	23.63	24.43	24.11	24.90	25.37
8H	4H	21.12	22.01	21.58	22.45	22.92	22.29	23.18	22.75	23.62	24.09
	6H	21.78	22.53	22.27	23.01	23.49	23.40	24.15	23.89	24.63	25.11
	8H	21.99	22.66	22.50	23.16	23.65	23.91	24.58	24.42	25.09	25.57
	12H	22.13	22.72	22.64	23.21	23.77	24.30	24.89	24.80	25.38	25.94
12H	4H	21.21	22.01	21.69	22.49	22.96	22.31	23.12	22.79	23.59	24.06
	6H	21.91	22.58	22.42	23.09	23.57	23.45	24.12	23.95	24.62	25.11
	8H	22.19	22.78	22.70	23.27	23.83	24.03	24.62	24.53	25.11	25.67